

REMARKS

Claims 1-16, 26-28, and 31-35 are pending herein.

I. The rejections of claims 1-16 and 31-35 under 35 U.S.C. § 112.

Applicants respectfully note that independent claims 1, 26, and 31 have been amended and claims 29-30 have been cancelled. Thus, it is respectfully believed that the § 112 rejection is moot, and Applicants respectfully request that the claims be reconsidered.

II. The amended claims are not obvious over the cited references of record.

In a previous Office Action dated March 6, 2006, the USPTO respectfully rejected claims 1-35 as being obvious over Javidi (US 5,903,648), in view of the Sun and Marom articles. Applicants respectfully note that claims 17-25 and 29-30 have been cancelled, and claims 1, 26, and 31 are the remaining independent claims.

A. The cited references do not teach or suggest sampling the encrypted data in the spatial domain to avoid overlap in the spatial domain between adjacent data at a receiving end, as claimed in claim 1.

Claim 1 claims in relevant part:

“sampling the encrypted data in the spatial domain to avoid overlap in the spatial domain between adjacent data at a receiving end;” (**emphasis added**)

No new matter is introduced by these amendments. Support for the amendments can be found on pages 10 and 12 of the present specification. Regarding these limitations, it is respectfully not seen where the cited references teach or suggest the claimed step quoted above.

Specifically, as the USPTO respectfully notes in the Office Action of March 6, 2006, on page 5, the Javidi and Sun references do not teach or suggest sampling to avoid overlap between adjacent data at the receiving end. To overcome this deficiency in Javidi and Sun, the USPTO respectfully cites pages 2861 and 2863 of Marom.

Marom, however, does not teach or suggest sampling the encrypted data in the spatial domain to avoid overlap in the spatial domain, as claimed in claim 1. Instead,

Marom teaches adding a “**temporal factor**” to overcome “**temporal overlap**” of pulses.

Specifically, as stated in Marom at page 2863, left column, last paragraph:

“The approximation . . . resulted in some loss of information regarding the **temporal overlap** of pulses in the input pupil function. We reintroduce this lost information by adding the **temporal factor** $K_n(t)$ to the equation.”
(emphasis added)

Additionally, Marom further states on page 2863, right column, first paragraph, that the “temporal factor” $K_n(t)$ is given by:

$$K_n(t) \cong w\left(\frac{ct}{\alpha}\right)w\left[\frac{c}{\alpha}\left(t - t_0 - \frac{n\Delta'}{c}\right)\right]$$

Thus, as seen from the multiple “t” terms, it is respectfully clear that **the sampling in Marom is in the temporal domain**, and is not sampling in the spatial domain, as claimed in claim 1.

In contrast, pages 10 and 12 of the present specification illustrate one possible embodiment of the method step quoted above. Specifically, as noted on page 10 of the specification, **Equation 4 describes the encrypted signal in the spatial domain**. As noted on page 12 of the present specification, **the encrypted signal of Equation 4 is sampled in the input plane, i.e., in the spatial domain**. Page 12 of the present specification further notes:

“This data sampling was required to avoid any overlap between adjacent data in the reconstructed **spatial** data at the receiver.” **(emphasis added)**

Additionally, page 12 of the present specification describes one possible embodiment of the sampling in Equation 10, which reads:

$$r'_i(x) = \sum A_i(n\Delta) \exp\{j\phi_i(n\Delta)\} \delta(x - n\Delta)$$

The $(x - n\Delta)$ sampling term in equation 10 clearly shows that **the sampling is done in the spatial domain**. Furthermore, by comparing the sampling term in equation 10 with the temporal factor $K_n(t)$ of Marom, it is respectfully clear that **the sampling in the spatial domain claimed in claim 1 is different from the adding of a temporal factor taught in Marom.**

Thus, it is respectfully asserted that the cited references, taken either alone or in combination, do not teach all the claimed limitations of claim 1. Therefore, it is respectfully asserted that claim 1 is allowable over the cited references.

B. Independent claims 26 and 31.

Similar to claim 1, independent claims 26 and 31 claim sampling in the spatial domain to avoid overlap in the spatial domain. As noted above, it is respectfully asserted that the cited references do not teach or suggest sampling in the spatial domain to avoid overlap in the spatial domain. Thus, it is respectfully asserted that claims 26 and 31 are allowable over the cited references.

C. The dependent claims.

As noted above, it is respectfully asserted that independent claims 1, 26, and 31 are allowable, and therefore it is further respectfully asserted that dependent claims 2-16, 27-28, and 32-35 are also allowable.

III. Conclusion.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Please telephone the undersigned for any reason. Applicants seek to cooperate with the Examiner and to expedite prosecution.

Respectfully submitted,

By _____
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The above is an "s-signature"
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